The Impact of Data Analytics on Fan Engagement Strategies in Professional Sports

Duvine Beebe

Seminar in Sport Management

Joey Elledge

3/2/25

Introduction

- - Data analytics transforms fan engagement
- - Multibillion-dollar industry impact
- - 63% of fans believe analytics improves experience (Golub, 2024)
- - Purpose: Analyze how data enhances engagement

Literature Review: Evolution of Sports Analytics

- - Early focus: Player performance (Jayal et al., 2018)
- - Shift to fan engagement (Fried & Mumcu, 2016)
- - AI and Big Data personalize strategies (Pu et al., 2024)
- - Ethical concerns: Losing emotional connection (Schoenfeld, 2023)

Annotated Bibliography Overview & Themes

- - Competitive Balance: Grow (2021)
- - Coaching/Management: Alamar (2013)
- - Fan Engagement & Revenue: Fried & Mumcu (2016), Herberger et al. (2021)
- - Data & Technology: Baumer et al. (2023), Pu et al. (2024)

Methodology

- - Qualitative analysis of literature and case studies
- - Sources: Academic research, Deloitte, Golden State Warriors
- - Identified themes: Personalization, AI/AR/VR, Social media
- - Goal: Understand effective strategies

Findings: Personalized Marketing & Promotions

- - Data segmentation targets fans
- - Personalized offers increase loyalty (Deloitte)
- - Drives ticket sales (Fried & Mumcu, 2016)
- - Examples: 'We miss you' campaigns

Findings: Smart Stadiums & Social Media Engagement

- - Smart stadium tech streamlines experiences (Golub, 2024)
- - Apps offer fan interaction: voting, orders
- - Social media analytics tailor content
- - Boosts in-person and online fan interaction

Emerging Technologies: AI, AR & VR

- - AI chatbots, highlight reels (Pu et al., 2024)
- - AR overlays real-time stats (NHL Edge)
- - VR courtside experiences (NBA)
- - Expands global access & revenue (Altman Solon, 2024)

Discussion: Ethical & Operational Challenges

- - Privacy and data security (Freethink, 2022)
- - Over-reliance risks losing human connection (Schoenfeld, 2023)
- - Resource inequality: Big vs. small market (Grow, 2021)
- - Balance data with authenticity

Conclusion & Recommendations

- - Invest in analytics ethically (Deloitte)
- - Fan-centric focus: enhance experience (Fried & Mumcu, 2016)
- - Prepare for AI, AR, VR expansion (Pu et al., 2024)
- - Blend data with human touch (Schoenfeld, 2023)

References

- - Baumer et al. (2023)
- - Deloitte (n.d.)
- - Fried & Mumcu (2016)
- - Grow (2021)
- - Herberger et al. (2021)
- - Joyce (2024)
- - Pu et al. (2024)
- - Schoenfeld (2023)